

While facing the day-to-day news stream, the most recent tragic events, such as heat waves, droughts, forest fires, and monsoon floods last July and August, tend to supersede the recollection of earlier ones. This CRED Crunch newsletter reminds us of the disaster-related events of the first half of 2022. During this period, the EM-DAT disaster database recorded 187 disasters from natural hazards¹ in 79 distinct countries. According to the available information, their impact amounts to at least 6,347 deaths, 50 million people affected and total damage estimates exceeding 40 billion dollars (Table 1). These estimates are below the 2002-2021 average, explained by disasters' impacts data being skewed by mega-disasters, such as the Haiti earthquake in January 2010 and its 222,000 fatalities. Nevertheless, the first semester's numbers are close to the median calculated for the same period. The numbers are provisional and may need to be adapted in the forthcoming 2022 annual report with new and updated reporting.

Table 1. Disasters occurrence and impact: summary

	2022 1 st sem.	2002-21 1 st sem. (Mean)	2002-21 1 st sem. (Median)
Number of disasters	187	170	167
Affected countries	79	78	75
Total deaths	6,347	35,207	6,551
Total affected	50,550,928	119,268,677	81,128,884
Economic damages ('000 US\$)	40,949,282	76,300,329	53,900,632

Floods have impacted India from May to August and Pakistan since June, each with more than one thousand deaths during monsoon seasons that have prolonged in the second semester (Table 2). Pakistan has been experiencing the most devastating and widespread floods in the last 30 years. The more than 30 million affected in Pakistan account for more than half of the semester's total of affected people worldwide (Tables 1 and 3). This represents one in seven people in Pakistan with nearly one-third of the country under water. In Bangladesh, millions of people have also been affected (Table 3).

¹ From EM-DAT data (2022-09-05), excluding technological, biological, and extra-terrestrial hazards. Disasters that have started prior to 2022 are excluded even if they are still ongoing during the first semester (mostly long-lasting droughts, e.g., in Somalia). Disasters that have started in the first semester are included even if they are still ongoing during the second semester.

Table 2. Top 10 disasters by number of deaths (1st sem. 2022)

Disaster	Months	Country	Total deaths
Flood	May-Aug	India	1354
Flood	Jun-Sep	Pakistan	1061
Earthquake	Jun	Afghanistan	1036
Flood	Apr	South Africa	501
Storm (Megi)	Apr	Philippines	289
Flood	Feb	Brazil	272
Storm (Batsirai)	Feb	Madagascar	121
Flood	May	Brazil	116
Flood	May-Jun	Bangladesh	82
Flood	Jun-Aug	Niger	75

Table 3. Top 10 disasters by total affected people (1st sem. 2022)

Disaster	Months	Country	N° affected
Flood	Jun-Sep	Pakistan	33,001,575
Flood	May-Jun	Bangladesh	7,200,000
Drought	Jun-Aug	Chad	2,100,000
Storm (Megi)	Apr	Philippines	2,081,361
Flood	May-Aug	India	981,220
Storm (Gombe)	Mar	Mozambique	736,123
Flood	Apr-Jun	Guatemala	668,205
Flood	Feb	Bolivia	375,000
Earthquake	Jun	Afghanistan	364,623
Storm (snow)	Jan	Syrian Arab Rep.	362,700

Table 4. Top 10 disasters by economic damage (1st sem. 2022)

Disaster	Months	Country	Econ. dam. ('000 US\$)
Earthquake	Mar	Japan	8,800,000
Flood	Feb-Mar	Australia	5,900,000
Flood	May	China	3,900,000
Storm	Apr	USA	3,200,000
Flood	Apr	South Africa	3,000,000
Storm	Mar	USA	3,000,000
Drought	Jan	USA	3,000,000
Storm	Apr	USA	2,200,000
Storm	Mar-Apr	USA	1,300,000
Storm	May	USA	1,300,000

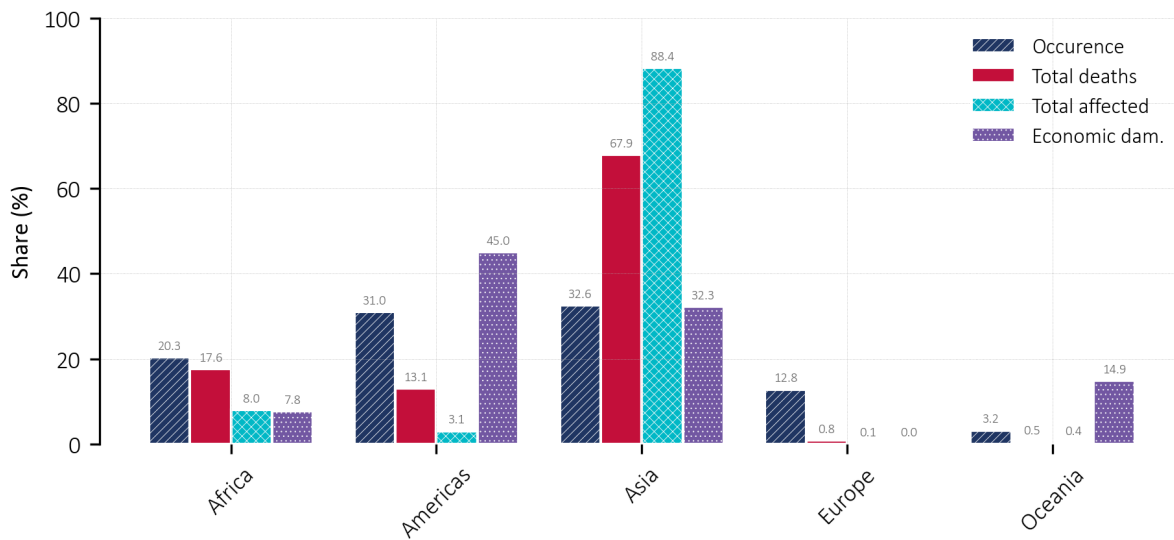


Fig 1. Disaster occurrence and impacts by continents (1st sem. 2022)

Outside of Asia, deadly floods have hit South Africa in April, Brazil in May, Niger in June and beyond (Table 2). Guatemala and Bolivia were also significantly exposed to floods (Table 3), while significant flood-related economic damages have been reported in Australia and China (Table 4).

Other major disasters include the June earthquake in Afghanistan, claiming more than a thousand lives. In addition, Chad experienced a drought affecting millions of people. Storms have had devastating effects as well during the first six months of 2022. Tropical Storm Megi hit the Philippines in a hard way, killing 289 people in April. Cyclone Batsirai in February was the second most deadly storm in 2022, with 121 fatalities reported in Madagascar. The following month, about 700 thousand people were affected by Tropical Cyclone Gombe in Mozambique. Back in January, Syria experienced heavy snowfall (Table 3). Altogether, in the USA, the total storm-related damage exceeds ten billion US\$ (Table 4).

All reported numbers may ask for some adaptations in the next annual report of 2022, e.g. no European economic damage figures have been registered or consolidated yet. Asia remains the most affected continent for this first semester, followed by the Americas (Fig. 1). Globally, floods remain the most frequent and damaging disaster, followed by storms (Fig. 2).

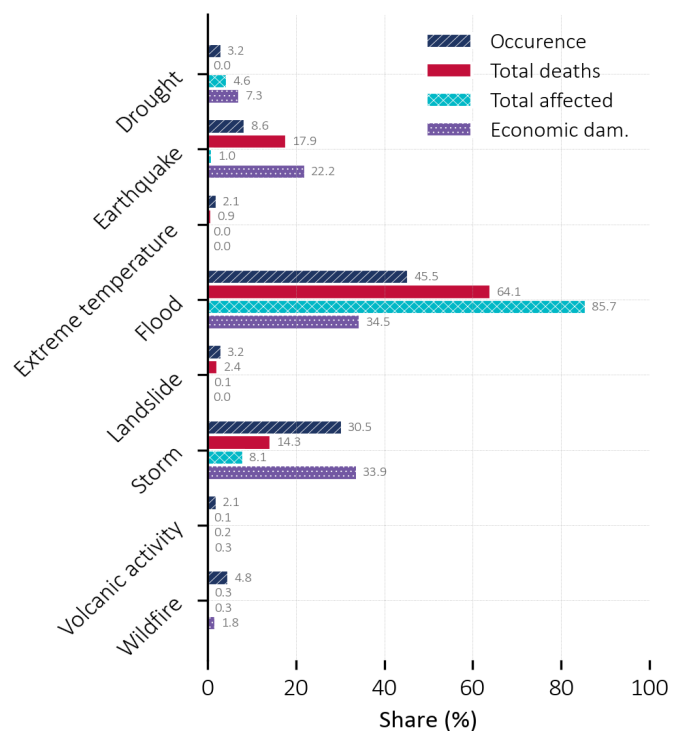


Fig 2. Occurrence and impacts by disaster types (1st sem. 2022)

CRED updates and recent publications

- CRED/UCLouvain and the Internal Displacement Monitoring Centre (IDMC) have signed a Memorandum of Understanding of partnership with the objective of (1) facilitating and supporting UCLouvain in access to IDMC data and (2) collaborating on expanding both organizations' Natural Language Processing (NLP) capacities and tools to strengthen event detection for disasters.
- Thomas Jidefor Ogbu has defended his doctoral thesis on : *Examining the impact of protracted conflicts on mortality in humanitarian emergencies : using small-scale surveys and conflict data from Yemen*. July 2022 ;
- Recently published paper:
Ogbu, T. J.; Scales, S. E. ; Moitinho De Almeida, M.; van Loenhout, J. ; Speybroeck, N. ; Guha-Sapir, D. *Predictors of exceeding emergency under-five mortality thresholds using small-scale survey data from humanitarian settings (1999 – 2020): considerations for measles vaccination, malnutrition, and displacement status*. In: *Archives of Public Health*, Vol. 80, no.1 (2022). doi:10.1186/s13690-022-00916-0.

All figures presented in the CRED CRUNCH from "EM-DAT: The OFDA/CRED International Disaster Database"
Analysis & Writing by Damien Delforge, Regina Below, & Niko Speybroeck
Centre for Research on the Epidemiology of Disasters (CRED)
Institute of Health & Society (IRSS), UCLouvain
Data are subject to change, for enquires: contact@emdat.be